

Application No.: 10/559,741

Filed: December 6, 2005

TC Art Unit: 3662

Confirmation No.: 3855

AMENDMENTS TO THE SPECIFICATION

Please amend the Abstract of the Disclosure as follows:

A system and method for estimating the ~~signal-to-noise ratio~~ {SNR} in a sonar environment and for determining the effect of the estimated SNR on sonar ranging accuracy. The system includes a sensor, a transmitter, a receiver, a plurality of band-pass filters, a cross correlator, and a data analyzer. The transmitter transmits a pulse-first signal having a predetermined frequency range through a transmission medium. The sensor senses ~~generates an echo returning from a selected target, and provides a~~ second signal representing corresponding the to an echo signal reflected from an object. The first and second signals are provided to the receiver, which in turn provides an indication of the echo to the band-pass filters, each. ~~The filters operative to pass a respective sub-band of frequencies. The filters provide filtered versions of the first and second signals echo and pulse to the cross correlator, which performs cross correlation operations on the filtered echo and pulse signals.~~ A data analyzer analyzes By analyzing the cross correlator output data, to determine the system can determine peak variability of cross correlation peaks within multiple each frequency sub-bands sub-

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band, thereby allowing more accurate SNR estimations in noisy environments.